# Hand Safety

AR Training Updated 2012

**DMME** 

**Division of Mineral Mining** 



### Hand Injuries

- Each year more than 1 million U.S. workers receive treatment for acute hand injuries.
- Over 100,000 of these result in lost time from work – 2<sup>nd</sup> only to back injuries.
- Hand injuries represent 1/3 of all disabling job injuries.
- Over 80% of the injuries were caused by pinch points.



### 2012 Reportable Injuries

#### In Virginia

- 52 total
  - 10 hand injuries (24%)
  - 9 arm/shoulder injuries (21%)
  - 3. 7 back injuries (17%)



# Injury Descriptions on Accident Reports

- Injured ring finger when wedding band caught on a ladder!?!?
- Two injuries associated with hand drills.
- Hand hit with a hammer (3 cases).
- Two injuries occurred while handling steel.
- A piece of pipe slipped catching a worker's thumb between the pipe and a concrete wall resulting in 18 stitches (cheater?).



### Hand Injury Descriptions, cont.

- Miner was prying a metal beam into position when it dropped and caught his left thumb.
- Miner pinched his finger between the release handle and cross bar on a material storage bin.
- While removing the lid on a transformer, miner's thumb was bent backward and sprained.
- Handling pipe, mashed and broke the tip of little finger.





## Top Three Accident Categories

- Hand Tools.
- 2. Slips/Falls.
- 3. Materials Handling.
- All hand injuries fell into these categories.

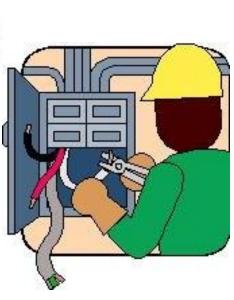




### PPE & Tools

- Use gloves designed to protect your hands from the specific hazards you are working around; heat, electricity, chemicals, etc.
- Are the hand tools you are using in good condition and designed for the specific job? For example; rubber clad tools for electrical work.







### Preventing Hand Injuries

#### Gloves

- □ Wear proper gloves for the job 70% of hand injury victims were not wearing gloves.
- ☐ Many of those who wore gloves were wearing the wrong glove for the job.
- Research shows that wearing gloves reduce hand injuries by 60%.









### Preventing Hand Injuries

- Beware of pinch points!
  - □ Pinch points are contributors to serious hand injuries.
  - □ Hinged doors, ladders, tailgates and other unpowered items that pivot can cause severe injuries.
  - □ Even when locked out, drive belts, pulleys etc. can create damaging pinch points with minimum movement within the system. Anticipate the movement and block where necessary!





### Preventing Hand Injuries

- Inspect and maintain your tools.
  - □ Keep blades sharp.
  - Ensure you are cutting away from yourself and others.
  - □ Use retractable blades whenever possible.
  - Keep the heads of hammers, chisels and other hand tools properly dressed.
  - Use parts and accessories designed specifically for the tool you are using.
  - Clean tools as often as necessary to prevent slipping.



### Tools Humorously Described

#### WIRE WHEEL:

Cleans paint off bolts and then throws them somewhere under the workbench with the speed of light. Also removes fingerprints and hardearned calluses from fingers in about the time it takes you to say, "Oh, crap!".

#### PRY BAR :

□ A tool used to crumple the metal surrounding that clip or bracket you needed to remove in order to replace a 50 cent part. Also, when it slips, allows you to smash your knuckles against the closest object.

#### PLIERS:

 Used to round off bolt heads. Sometimes used in the creation of bloodblisters.

#### VISE-GRIPS:

Generally used after pliers to completely round off bolt heads. If nothing else is available, they can also be used to transfer intense welding heat to the palm of your hand.



#### More On Tools

#### UTILITY KNIFE:

□ Used to open and slice through the contents of cardboard boxes. Works particularly well on contents such as liquids in plastic bottles, refund checks, and rubber or plastic parts. Especially useful for slicing work clothes and fingers, but only while in use.

#### HAMMER:

 Originally employed as a weapon of war, the hammer nowadays is used as a kind of divining rod to locate the most expensive parts adjacent to the object we are trying to hit usually smashing it and the thumb that is holding the object. See: <u>S.O.B. Tool</u>

#### ■ S.O.B. Tool:

Any handy tool that you grab and throw across the shop while yelling, "Son of a b\*tch" at the top of your lungs. It is also, most often, the next tool that you will need.

# No Kidding...Avoid This!!

